

IN THE CLAIMS

1 (1) Claim 1: (previously presented) A telephone call and voice processing system
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to one of a plurality of telecommunications devices coupled to the system in
5 accordance with information accompanying the call that identifies the
6 telecommunications device, wherein two or more of the plurality of telecommunications
7 devices each further comprises both a speaker and a microphone for enabling a user to
8 audibly communicate with the call; and

9 voice processing circuitry for automatically interacting with the call, wherein the
10 switching circuitry and the voice processing circuitry are controlled by not more than one
11 microprocessor.

1 (2) Claim 2: (previously presented) The system as recited in claim 1, wherein the
2 voice processing circuitry further comprises a signal processing circuitry coupled to the
3 one microprocessor.

1 (3) Claim 3: (previously presented) A telephone call and voice processing system
2 comprising:
3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to a telecommunications device coupled to the system; and

5 voice processing circuitry for automatically interacting with the call, wherein the
6 switching circuitry and the voice processing circuitry are controlled by a single
7 processing means, wherein the voice processing circuitry further comprises a signal
8 processing circuitry coupled to the single processing means, wherein the switching
9 circuitry further comprises a digital cross-point matrix coupled to the single processing
10 means and to the signal processing circuitry.

(4) Claim 4: (cancelled)

(5) Claim 5: (cancelled)

1 (6) Claim 6: (previously presented) A telephone call and voice processing system
2 comprising:
3 a plurality of telecommunications devices coupled to the system as extensions;
4 switching circuitry for receiving a call, wherein the switching circuitry connects
5 the call to one of the telecommunications devices; and
6 voice processing circuitry for automatically interacting with the call, wherein the
7 switching circuitry and the voice processing circuitry are controlled by a single
8 processing means, wherein the single processing means is controlled by a single set of
9 software operable for controlling both the switching circuitry and the voice processing
10 circuitry.

(7) Claim 7: (cancelled)

(8) Claim 8: (cancelled)

(9) Claim 9: (cancelled)

(10) Claim 10: (cancelled)

(11) Claim 11: (cancelled)

1 (12) Claim 12: (previously presented) A telephone call and voice processing system
2 comprising:
3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to a telecommunications device coupled to the system, wherein two or more of
5 the plurality of telecommunications devices each further comprises both a speaker and a
6 microphone for enabling a user to audibly communicate with the call; and
7 voice processing circuitry for automatically interacting with the call, wherein the
8 switching circuitry and the voice processing circuitry are controlled by a single
9 processing means, wherein the voice processing circuitry further comprises a signal
10 processing circuitry coupled to the single processing means, wherein the signal
11 processing circuitry further includes:

12 a DTMF receiver operable for recognizing DTMF tones from the call and
13 instructing the switching circuitry to connect the call to the telecommunications device
14 identified by the DTMF tones.

(13) Claim 13: (cancelled)

(14) Claim 14: (cancelled)

(15) Claim 15: (cancelled)

(16) Claim 16: (cancelled)

(17) Claim 17: (cancelled)

1 (18) Claim 18: (previously presented) The system as recited in claim 2, further
2 comprising circuitry operable for recording all or a portion of the call during an off-hook
3 state after the telecommunications device is connected to the call.

1 (19) Claim 19: (previously presented) The system as recited in claim 18, wherein the
2 recording circuitry operates in response to a user manually pressing a button on a
3 telephone set.

1 (20) Claim 20: (previously presented) A telephone call and voice processing system
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to one of a plurality of telecommunications devices coupled to the system in
5 accordance with information accompanying the call that identifies the
6 telecommunications device;

7 voice processing circuitry for automatically interacting with the call, wherein the
8 switching circuitry and the voice processing circuitry are controlled by not more than one
9 microprocessor; and

10 circuitry operable for recording all or a portion of the call during an off-hook state
11 after the telecommunications device is connected to the call, wherein the recording

12 circuitry operates in response to a user manually pressing a button on a telephone set, and
13 wherein the recording circuitry further comprises:

14 circuitry for coupling a recording buffer in signal processing circuitry to the call,
15 wherein the signal processing circuitry is coupled to the one processor.

(21) Claim 21: (cancelled)

(22) Claim 22: (cancelled)

(23) Claim 23: (cancelled)

1 (24) Claim 24: (original) The system as recited in claim 1, further comprising:
2 circuitry for listening to a voice signal at a telephone extension coupled to the
3 system;
4 circuitry for activating a recording sequence to record the voice signal; and
5 circuitry for storing the recorded voice signal in a digital memory.

1 (25) Claim 25: (original) The system as recited in claim 24, wherein the activating
2 circuitry is tactilely initiated by a user of the telephone extension.

1 (26) Claim 26: (original) The system as recited in claim 25, wherein the voice signal
2 originated from the call.

1 (27) Claim 27: (previously presented) A telephone call and voice processing system
2 comprising:
3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to a telecommunications device coupled to the system, wherein two or more of
5 the plurality of telecommunications devices each further comprises both a speaker and a
6 microphone for enabling a user to audibly communicate with the call;
7 voice processing circuitry for automatically interacting with the call, wherein the
8 switching circuitry and the voice processing circuitry are controlled by a single
9 processing means;

10 circuitry for listening to a voice signal at a telephone extension coupled to the
11 system;
12 circuitry for activating a recording sequence to record the voice signal; and
13 circuitry for storing the recorded voice signal in a digital memory, wherein the
14 activating circuitry is tactically initiated by a user of the telephone extension, wherein
15 the voice signal originated from a voice mail message stored in the system.

(28) Claim 28: (cancelled)

(29) Claim 29: (cancelled)

(30) Claim 30: (cancelled)

(31) Claim 31: (cancelled)

(32) Claim 32: (cancelled)

(33) Claim 33: (cancelled)

(34) Claim 34: (cancelled)

(35) Claim 35: (cancelled)

(36) Claim 36: (cancelled)

(37) Claim 37: (cancelled)

(38) Claim 38: (cancelled)

(39) Claim 39: (cancelled)

(40) Claim 40: (cancelled)

(41) Claim 41: (cancelled)

(42) Claim 42: (cancelled)

(43) Claim 43: (cancelled)

(44) Claim 44: (cancelled)

(45) Claim 45: (cancelled)

(46) Claim 46: (cancelled)

(47) Claim 47: (cancelled)

(48) Claim 48: (cancelled)

(49) Claim 49: (cancelled)

(50) Claim 50: (cancelled)

(51) Claim 51: (cancelled)

(52) Claim 52: (cancelled)

(53) Claim 53: (cancelled)

(54) Claim 54: (cancelled)

(55) Claim 55: (cancelled)

(56) Claim 56: (cancelled)

(57) Claim 57: (cancelled)

1 (58) Claim 58: (previously presented) In a telephone call and voice processing system
2 comprising switching circuitry for receiving an incoming call from a source external to
3 the system, wherein the switching circuitry connects the incoming call to a
4 telecommunications device coupled to the system from among a plurality of
5 telecommunications devices connected as telephone extensions to the system, and voice

6 processing circuitry for automatically interacting with the call, wherein the switching
7 circuitry and the voice processing circuitry are controlled by a single processing means, a
8 method comprising the steps of:

9 listening to a voice signal at a telephone extension coupled to the system;
10 activating a recording sequence to record the voice signal; and
11 storing the recorded voice signal in a memory.

1 (59) Claim 59: (original) The method as recited in claim 58, wherein the activating
2 step is tactilely initiated by a user of the telephone extension.

1 (60) Claim 60: (original) The method as recited in claim 58, wherein the voice signal
2 originated from the call to the system.

1 (61) Claim 61: (original) The method as recited in claim 58, wherein the voice signal
2 originated from a voice mail message stored in the system.

(62) Claim 62: (cancelled)

(63) Claim 63: (cancelled)

(64) Claim 64: (cancelled)

(65) Claim 65: (cancelled)

(66) Claim 66: (cancelled)

(67) Claim 67: (cancelled)

(68) Claim 68: (cancelled)

1 (69) Claim 69: (previously presented) A telephone call and voice processing system
2 comprising:

3 switching circuitry for receiving an incoming call from a source external to the
4 system, wherein the switching circuitry connects the incoming call to one of a plurality of
5 telecommunications devices coupled to the system as extensions to the system; and

1 voice processing circuitry for automatically interacting with the call, wherein the
2 switching circuitry and the voice processing circuitry are controlled by a single
3 microprocessor.

1 (70) Claim 70: (previously presented) A telephone call and voice processing system
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to one of a plurality of telecommunications devices coupled to the system; and

5 voice processing circuitry for automatically interacting with the call, wherein the
6 switching circuitry further comprises a digital cross-point matrix.

1 (71) Claim 71: (previously presented) A telephone call and voice processing system
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to one of a plurality of telecommunications devices coupled to the system;

5 the plurality of telecommunications devices connected to the system as telephone
6 extensions accessible solely through the switching circuitry;

7 voice processing circuitry for automatically interacting with the call, wherein the
8 switching circuitry and the voice processing circuitry are controlled by a single
9 processing means;

10 circuitry for listening to a voice signal at one of the telephone extensions coupled
11 to the system;

12 circuitry for activating a recording sequence to record the voice signal; and

13 circuitry for storing the recorded voice signal in a digital memory.

1 (72) Claim 72: (previously presented) A telephone call and voice processing system
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to a telecommunications device coupled to the system;

5 voice processing circuitry for automatically interacting with the call, wherein the
6 switching circuitry and the voice processing circuitry are controlled by a single
7 processing means; and

1 circuitry for permitting a user of a telephone coupled to the system to monitor a
2 voice mail message while the message is being recorded into the user's mailbox.

1 (73) Claim 73: (previously presented) The system as recited in claim 1, wherein the
2 information is detected DTMF tones.

1 (74) Claim 74: (previously presented) The system as recited in claim 1, wherein the
2 call is received by the switching circuitry from a central office trunk line.

1 (75) Claim 75: (previously presented) The system as recited in claim 6, wherein the
2 call is received from a source external to the system, and is connected to one of the
3 telecommunications devices in accordance with detected DTMF tones accompanying the
4 call, wherein the DTMF tones identify the telecommunications device to which the call is
5 directed.

1 (76) Claim 76: (previously presented) A telephone call and voice processing system
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to a telecommunications device coupled to the system; and

5 voice processing circuitry for automatically interacting with the call, wherein the
6 switching circuitry and the voice processing circuitry are controlled by a single
7 processing means, wherein the voice processing circuitry further comprises a signal
8 processing circuitry coupled to the single processing means, wherein the signal
9 processing circuitry further includes:

10 a DTMF receiver operable for recognizing DTMF tones from the call and
11 instructing the switching circuitry to connect the call to the telecommunications device
12 identified by the DTMF tones, wherein the telecommunications device is one of a
13 plurality of telephone extensions connected to the switching circuitry.

1 (77) Claim 77: (previously presented) A telephone call and voice processing system
2 comprising:

3 switching circuitry for receiving a call, wherein the switching circuitry connects
4 the call to a telecommunications device coupled to the system;

5 voice processing circuitry for automatically interacting with the call, wherein the
6 switching circuitry and the voice processing circuitry are controlled by a single
7 processing means;

8 circuitry for listening to a voice signal at a telephone extension coupled to the
9 system;

10 circuitry for activating a recording sequence to record the voice signal; and

11 circuitry for storing the recorded voice signal in a digital memory, wherein the
12 activating circuitry is tactically initiated by a user of the telephone extension, wherein
13 the voice signal originated from a voice mail message stored in the system, wherein the
14 call is an incoming call received by the switching circuitry via a central office trunk line,
15 and wherein the switching circuitry connects the incoming call to one of a plurality of
16 telecommunications devices coupled to the system as telephone extensions to the system.

1 (78) Claim 78: (previously presented) The method as recited in claim 58, wherein the
2 external source is a central office trunk line.

1 (79) Claim 79: (previously presented) The method as recited in claim 58, wherein the
2 switching circuitry connects the incoming call to one of the plurality of
3 telecommunications devices in response to information accompanying the incoming call
4 that identifies the telecommunications device to which the incoming call is connected to.

1 (80) Claim 80: (previously presented) The system as recited in claim 69, wherein the
2 external source is a central office trunk line.

1 (81) Claim 81: (previously presented) The system as recited in claim 69, wherein the
2 switching circuitry connects the incoming call to one of the plurality of extensions in
3 response to information accompanying the incoming call that identifies the one of the
4 plurality of extensions.

1 (82) Claim 82: (previously presented) The system as recited in claim 81, wherein the
2 information is detected DTMF tones.

1 (83) Claim 83: (previously presented) A telephone call and voice processing system
2 comprising:

3 a single microprocessor;

4 switching circuitry controlled by the single microprocessor;

5 a trunk line connected to the switching circuitry and adaptable for connecting to
6 central office trunk circuitry;

7 a plurality of telephone extensions;

8 extension lines coupling the plurality of telephone extensions to the switching
9 circuitry, wherein a call received by the switching circuitry over the trunk line is
10 connected to one of the plurality of telephone extensions by the switching circuitry in
11 response to information accompanying the call which identifies the one of the plurality of
12 telephone extensions the call desires to be connected to; and

13 voice processing circuitry for automatically interacting with the call such as for
14 coupling the call to a voice mail box associated with the one of the telephone extensions.

1 (84) Claim 84: (previously presented) The system as recited in claim 1, wherein each
2 of the two or more of the plurality of telecommunications devices are separately operable
3 telephone extensions.